

Appendix table 5-32.

**Academic doctoral scientists and engineers, by primary work activity: 1973–99**  
 (Thousands)

Year	Total employment				Full-time faculty			
	Total	Research	Teaching	Other	Total	Research	Teaching	Other
<b>S&amp;E total</b>								
1973 .....	118.0	27.8	73.3	15.0	103.3	19.8	69.9	12.0
1975 .....	134.1	30.8	83.8	16.4	116.4	21.4	80.2	12.2
1977 .....	145.4	37.0	82.2	23.8	125.6	25.8	78.4	19.6
1979 .....	155.3	41.3	83.8	29.1	131.2	28.1	79.7	22.6
1981 .....	167.1	46.5	95.9	23.0	141.9	31.8	92.1	16.7
1983 .....	176.1	48.9	97.7	28.1	148.4	33.6	91.9	21.8
1985 .....	190.2	55.9	101.0	30.5	156.9	39.5	94.9	20.3
1987 .....	195.9	66.5	99.3	29.5	164.4	48.6	93.6	21.8
1989 .....	206.6	72.2	100.9	32.6	169.8	51.6	93.9	23.4
1991 .....	210.6	73.9	103.4	32.3	173.1	53.8	96.7	22.4
1993 .....	213.8	80.2	98.3	35.2	172.4	56.8	91.4	24.1
1995 .....	217.5	83.0	100.2	34.3	171.4	56.6	91.9	22.9
1997 .....	232.5	88.6	105.4	38.6	178.4	58.0	95.4	24.9
1999 .....	240.2	91.4	108.6	40.2	184.0	60.4	98.6	25.0
<b>Physical sciences</b>								
1973 .....	22.1	5.9	14.0	1.9	17.8	3.0	13.3	1.3
1975 .....	23.6	6.4	14.6	2.1	18.9	3.4	13.9	1.3
1977 .....	25.0	7.9	13.8	3.0	20.0	4.4	13.1	2.3
1979 .....	24.6	7.5	13.4	3.6	20.0	4.4	12.7	2.7
1981 .....	25.3	8.0	14.7	2.4	20.5	4.6	14.1	1.6
1983 .....	25.1	7.7	14.0	3.1	20.2	4.5	13.1	2.4
1985 .....	27.0	9.4	14.4	3.0	21.2	5.6	13.6	1.9
1987 .....	27.2	10.2	14.0	2.9	22.0	6.5	13.4	2.0
1989 .....	27.7	10.9	13.7	3.0	21.5	6.5	12.8	2.2
1991 .....	27.7	10.6	13.8	3.1	21.7	6.7	12.8	2.1
1993 .....	28.6	12.0	12.8	3.8	21.3	7.1	11.8	2.3
1995 .....	29.4	12.6	12.9	3.8	20.9	6.9	11.6	2.3
1997 .....	30.2	12.7	13.5	4.0	21.4	6.8	12.2	2.4
1999 .....	30.9	12.2	14.0	4.7	21.7	6.7	12.7	2.3
<b>Mathematics</b>								
1973 .....	9.7	1.5	7.4	0.6	9.3	1.4	7.2	0.6
1975 .....	11.0	1.5	8.5	0.9	10.4	1.3	8.2	0.7
1977 .....	11.7	1.8	8.5	1.2	10.9	1.6	8.1	1.1
1979 .....	12.2	2.1	8.6	1.4	11.4	1.8	8.3	1.3
1981 .....	12.4	1.9	9.1	1.2	11.7	1.8	8.8	1.0
1983 .....	12.9	2.0	9.4	1.4	12.3	1.8	9.0	1.3
1985 .....	13.6	2.7	9.3	1.4	12.7	2.5	8.9	1.2
1987 .....	13.8	3.2	9.2	1.3	12.9	2.7	9.0	1.2
1989 .....	14.5	3.5	9.5	1.4	13.5	3.2	9.0	1.2
1991 .....	15.2	3.5	10.1	1.5	14.2	3.2	9.6	1.3
1993 .....	15.5	3.4	10.3	1.8	14.7	3.1	10.0	1.6
1995 .....	14.6	3.3	9.8	1.5	13.0	2.7	9.0	1.3
1997 .....	15.6	3.5	10.2	1.8	13.6	2.8	9.3	1.5
1999 .....	15.2	2.9	10.5	1.7	13.1	2.3	9.4	1.4
<b>Computer sciences</b>								
1973 .....	NA	NA	NA	NA	NA	NA	NA	NA
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0
1981 .....	0.3	0.1	0.2	0.0	0.3	0.1	0.2	0.0
1983 .....	0.5	0.2	0.3	0.0	0.4	0.1	0.3	0.0
1985 .....	0.8	0.4	0.3	0.1	0.7	0.3	0.3	0.1
1987 .....	1.1	0.7	0.3	0.1	0.9	0.5	0.3	0.0
1989 .....	1.5	0.8	0.6	0.1	1.3	0.7	0.5	0.1
1991 .....	2.0	1.1	0.7	0.2	1.8	1.0	0.7	0.1
1993 .....	2.5	0.9	1.4	0.2	2.3	0.7	1.3	0.2
1995 .....	3.1	1.0	1.8	0.3	2.8	0.9	1.7	0.2
1997 .....	3.3	1.1	1.8	0.5	3.0	1.0	1.7	0.3
1999 .....	3.7	1.1	2.1	0.5	3.3	0.9	2.0	0.3

See explanatory notes, and SOURCE, if any, at end of table

Appendix table 5-32.

**Academic doctoral scientists and engineers, by primary work activity: 1973–99**  
 (Thousands)

Year	Total employment				Full-time faculty			
	Total	Research	Teaching	Other	Total	Research	Teaching	Other
<b>Earth, atmospheric, and ocean sciences</b>								
1973 .....	3.4	0.7	2.3	0.4	3.0	0.5	2.2	0.3
1975 .....	3.9	0.8	2.7	0.3	3.4	0.5	2.6	0.2
1977 .....	4.2	1.0	2.7	0.4	3.6	0.6	2.6	0.3
1979 .....	4.2	1.0	2.5	0.7	3.5	0.6	2.4	0.5
1981 .....	4.6	1.4	2.8	0.4	3.8	0.8	2.8	0.2
1983 .....	4.8	1.5	2.8	0.5	4.0	0.9	2.7	0.4
1985 .....	5.2	1.6	3.0	0.6	4.2	0.9	2.9	0.4
1987 .....	5.6	2.1	2.9	0.5	4.4	1.3	2.8	0.3
1989 .....	5.9	2.4	3.0	0.5	4.7	1.5	2.8	0.3
1991 .....	6.0	2.5	3.0	0.5	4.5	1.5	2.8	0.2
1993 .....	6.4	2.7	2.9	0.8	4.5	1.6	2.5	0.4
1995 .....	6.4	2.6	3.0	0.8	4.7	1.5	2.8	0.4
1997 .....	7.3	2.9	3.2	1.2	5.1	1.6	2.9	0.6
1999 .....	7.8	2.9	3.8	1.1	5.6	1.5	3.4	0.7
<b>Life sciences</b>								
1973 .....	34.9	12.8	16.6	4.9	29.5	9.3	15.7	3.9
1975 .....	39.4	14.5	19.0	4.8	33.1	10.3	18.1	3.7
1977 .....	42.6	16.6	18.1	7.3	34.9	11.4	17.1	6.0
1979 .....	47.0	19.7	18.1	9.0	37.3	13.1	17.1	6.9
1981 .....	51.3	23.2	20.5	7.0	40.9	15.5	19.6	5.3
1983 .....	54.9	24.3	21.1	8.9	43.5	16.5	19.6	7.0
1985 .....	58.7	27.1	20.9	9.7	45.6	18.6	19.5	6.7
1987 .....	61.3	31.5	20.1	9.5	48.1	22.3	18.7	7.1
1989 .....	64.8	33.8	20.3	10.3	49.3	22.6	18.7	7.6
1991 .....	66.9	34.5	20.9	11.3	51.1	23.8	19.1	8.1
1993 .....	68.2	36.0	20.2	12.0	50.8	24.1	18.4	8.3
1995 .....	71.6	37.7	21.8	12.2	52.8	24.7	19.8	8.3
1997 .....	77.3	40.5	23.4	13.4	55.2	25.7	20.7	8.7
1999 .....	81.9	43.2	25.1	13.6	58.1	27.0	22.5	8.6
<b>Psychology</b>								
1973 .....	12.2	2.0	7.7	2.3	10.8	1.6	7.3	1.8
1975 .....	14.8	2.2	9.7	2.7	12.8	1.5	9.2	1.9
1977 .....	16.2	2.8	9.4	3.8	13.9	2.0	8.9	2.8
1979 .....	17.7	3.4	9.5	4.6	14.3	2.2	8.9	3.2
1981 .....	20.1	4.1	11.7	4.3	16.4	2.5	11.0	2.9
1983 .....	21.0	4.4	11.6	4.9	17.3	2.9	10.9	3.4
1985 .....	23.1	4.6	12.3	5.9	18.5	3.3	11.6	3.4
1987 .....	23.7	5.2	13.0	5.6	19.2	3.9	12.1	3.3
1989 .....	25.0	5.9	12.8	6.2	20.2	4.5	11.9	3.6
1991 .....	25.2	6.2	12.8	6.1	20.7	5.0	12.2	3.6
1993 .....	25.0	6.7	11.6	6.7	19.5	5.3	10.5	3.7
1995 .....	26.1	7.4	11.9	6.9	20.1	5.4	10.9	3.8
1997 .....	27.3	8.0	12.4	7.0	20.8	5.9	11.3	3.6
1999 .....	29.0	8.6	13.0	7.3	21.9	6.1	11.9	3.9
<b>Social sciences</b>								
1973 .....	23.4	2.8	16.9	3.1	21.6	2.5	16.1	2.6
1975 .....	28.0	3.2	20.5	3.6	25.5	2.7	19.5	2.6
1977 .....	31.1	4.1	21.0	5.2	28.8	3.6	20.1	4.5
1979 .....	33.6	4.2	22.6	6.5	30.4	3.4	21.4	5.3
1981 .....	36.9	4.5	26.8	5.1	33.7	3.8	25.7	3.8
1983 .....	38.9	4.9	27.7	5.9	34.4	3.8	25.9	4.5
1985 .....	42.0	5.7	29.1	6.3	36.1	4.6	26.8	4.0
1987 .....	42.2	7.5	28.5	6.0	37.7	6.3	26.5	4.7
1989 .....	44.5	8.2	28.8	7.4	39.0	7.1	26.4	5.3
1991 .....	44.8	8.4	29.8	6.4	39.0	7.1	27.6	4.2
1993 .....	44.4	10.7	27.6	6.1	39.2	8.9	25.9	4.5
1995 .....	42.5	9.8	26.9	5.8	37.1	8.3	24.6	4.2
1997 .....	44.9	9.8	28.3	6.8	37.7	7.6	25.3	4.8
1999 .....	46.2	11.1	28.0	7.2	39.2	9.2	24.9	5.1

See explanatory notes, and SOURCE, if any, at end of table

Appendix table 5-32.

**Academic doctoral scientists and engineers, by primary work activity: 1973–99**  
 (Thousands)

Year	Total employment				Full-time faculty			
	Total	Research	Teaching	Other	Total	Research	Teaching	Other
<b>Engineering</b>								
1973 .....	12.4	2.1	8.4	1.7	11.3	1.5	8.1	1.5
1975 .....	13.4	2.3	8.9	2.0	12.2	1.7	8.7	1.6
1977 .....	14.8	2.9	8.7	2.9	13.5	2.3	8.5	2.6
1979 .....	15.8	3.4	9.1	3.3	14.3	2.6	8.9	2.8
1981 .....	16.1	3.3	10.1	2.7	14.7	2.7	10.0	1.9
1983 .....	18.1	3.9	10.8	3.4	16.4	3.0	10.4	2.9
1985 .....	19.9	4.4	11.7	3.5	17.9	3.7	11.2	2.6
1987 .....	21.2	6.2	11.3	3.7	19.3	5.0	11.0	3.2
1989 .....	22.8	6.9	12.2	3.7	20.2	5.4	11.7	3.1
1991 .....	22.8	7.2	12.2	3.3	20.1	5.5	11.8	2.7
1993 .....	23.1	7.9	11.6	3.7	20.1	6.0	11.0	3.1
1995 .....	23.8	8.7	12.1	3.0	20.0	6.3	11.5	2.2
1997 .....	26.6	10.1	12.6	3.8	21.5	6.7	12.0	2.8
1999 .....	25.5	9.4	12.1	4.0	21.1	6.7	11.7	2.7

NA = not available

NOTES: Data exclude scientists and engineers with doctorates from foreign institutions. Field refers to field of degree.

SOURCE: National Science Foundation, Division of Science Resources Statistics (NSF/SRS), Survey of Doctorate Recipients, unpublished tabulations.

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